

In the Claims

Following is a listing of the claims in the application, with claims 1 and 11-14 shown as amended and claim 10 canceled.

Listing of Claims

1. (currently amended) An audio signal reproducing apparatus, comprising:
scratching operation means;
rotational speed detection means which detects at least a rotational speed of said scratching operation means and outputs said detected rotational speed as a rotational speed signal; and
processing means for reproducing audio data, which have already been read from an audio signal recording medium and stored, in accordance with said rotational speed signal, wherein
said scratching operation means comprises:
first operation means;
second operation means differing from said first operation means, wherein a rotational speed of signal from said first operation means and ~~that of said~~ a rotational speed signal from one of the first and second operation means, ~~both being~~ which is achieved at the same detected rotational speed, differ from each other; and
detection means for detecting which of the first and second operation means has been actuated, wherein
said processing means reproduces said audio data, in accordance with said rotational speed signal output from said rotational speed detection means through use of a reference rotational speed signal assigned to said one of the first and second operation means which is detected by said detection means from among a predetermined rotational speed signal of said first operation means and a predetermined rotational speed signal of said second operation means, both

predetermined rotational speed signals having been achieved at a reference rotational speed.

2. (currently amended) The apparatus defined in claim 1, wherein said first and second operation means have disk-shaped operation surfaces, the operation surfaces differing in radius from each other.

3. (original) The apparatus defined in claim 1, wherein said first operation means is a jog dial; and
said second operation means is a turntable.

4. (original) The apparatus defined in claim 1, wherein said rotational speed signal is a pulse signal having a cycle corresponding to a rotational speed; and
said processing means comprises

storage means which stores reference cycle data pertaining to a rotational speed signal output from said first operation means and reference cycle data pertaining to a rotational speed signal of the second operation means when said reference rotational speed is constant double speed, wherein

said processing means reproduces said audio signal data at a reproduction speed corresponding to the cycle of said rotational speed signal output from said scratching operation means while taking, as a reference, said reference cycle data that pertain to said first operation means and have been stored in said storage means when said first operation means has been actuated or said reference cycle data that pertain to said second operation means and have been stored in said storage means when said second operation means has been actuated.

5. (original) The apparatus according to claim 1, further comprising:

rotational angle detection means which detects a rotational angle of said scratching operation means and outputs said rotational angle as a rotational angle signal, wherein

said rotational angle signal is a pulse signal having the number of pulses corresponding to said rotational angle; wherein

said processing means comprises

storage means for storing reference cycle data pertaining to said rotational speed signal of said first operation means and reference pulse count data pertaining to said rotational angle signal of said first operation means and reference cycle data pertaining to said rotational speed signal of said second operation means and reference pulse count data pertaining to said rotational angle signal of said second operation means, when said reference rotational speed is constant double speed and at a predetermined rotational angle; and wherein

said processing means reproduces said audio signal data in accordance with the cycle of said rotational speed signal output from said scratching operation means and the number of pulses of said rotational angle signal output from said scratching operation means while taking as references said reference cycle data and said reference pulse count data, which have been stored in said storage means at the time of actuation of the first operating means and pertain to said first operation means, or said reference cycle data and said reference pulse count data which have been stored in said storage means at the time of actuation of the second operating means and pertain to said second operation means.

6. (original) The apparatus defined in claim 5, wherein said predetermined angle is 360°.

7. (original) The apparatus defined in claim 3, further comprising:

variation detection means for detecting the amount of chronological variations in said rotational speed signal output from said turntable, wherein

said processing means reproduces said audio signal while assuming that said turntable is rotating at said reference rotational speed, regardless of said rotational speed signal output from said turntable when said chronological variation is equal to or less than an allowable level and reproduces said audio signal data at a reproduction speed corresponding to the cycle of said rotational speed signal when said chronological variations exceed said allowable level.

8. (currently amended) The apparatus defined in claim 7, means for changing said allowable level, wherein said allowable ~~value~~ level is stored in RAM of said processing means ~~and further comprises means for changing said allowable level~~.

9. (original) The apparatus defined in claim 5, further comprising:
means for calibrating said reference cycle data and said reference pulse count data, both being stored in said storage means, on the basis of a pulse cycle and the number of pulses which are obtained when said rotational speed of said scratching operation means detected by said rotational speed detection means and said rotational angle detection means is constant double speed and when said rotational angle of said scratching operation means is 360°.

10. (Canceled).

11. (currently amended) ~~The apparatus according to claim 10;~~ An audio signal reproduction apparatus, comprising:
rotational operation means; and

processing means which reproduces an audio signal recorded on an optical disk in accordance with at least a rotational signal representing an operation speed of said rotational operation means and which outputs said audio signal as scratch sound,

wherein

said rotational operation means includes first and second rotational operation means; and

said processing means has conversion means for converting at least either a rotational signal output from said first rotational operation means or a rotational signal output from said second rotational operation means such that an identical rotational signal is achieved when said first and second rotational operation means are rotated at the same rotational speed,

wherein

said rotational signal is a pulse signal having a cycle corresponding to said operation speed; and

said conversion means converts a the rotational signal through use of a ratio of the cycle of said rotational signal of said first operation means achieved at said reference rotational speed to the cycle of said rotational signal of said second operation means achieved at said reference rotational speed.

12. (currently amended) ~~The apparatus according to claim 10,~~ An audio signal reproduction apparatus, comprising:

rotational operation means; and

processing means which reproduces an audio signal recorded on an optical disk in accordance with at least a rotational signal representing an operation speed of said rotational operation means and which outputs said audio signal as scratch sound,

wherein

_____ said rotational operation means includes first and second rotational operation means; and

_____ said processing means has conversion means for converting at least either a rotational signal output from said first rotational operation means or a rotational signal output from said second rotational operation means such that an identical rotational signal is achieved when said first and second rotational operation means are rotated at the same rotational speed.

wherein

said rotational signal is a pulse signal having a cycle corresponding to said operation speed; and

said conversion means converts a the rotational signal by means of multiplying the cycle of said rotational signal of said first rotational operation means by a ratio of the cycle of said rotational signal of said first operation means achieved at said reference rotational speed to the cycle of said rotational signal of said second operation means achieved at said reference rotational speed.

13. (currently amended) ~~The apparatus according to claim 10,~~ An audio signal reproduction apparatus, comprising:

_____ rotational operation means; and

_____ processing means which reproduces an audio signal recorded on an optical disk in accordance with at least a rotational signal representing an operation speed of said rotational operation means and which outputs said audio signal as scratch sound.

wherein

_____ said rotational operation means includes first and second rotational operation means; and

_____ said processing means has conversion means for converting at least either a rotational signal output from said first rotational operation means or a rotational signal

output from said second rotational operation means such that an identical rotational signal is achieved when said first and second rotational operation means are rotated at the same rotational speed,

wherein

said rotational signal is a pulse signal having a cycle corresponding to said operation speed and the number of pulses corresponding to an operation angle; and

said conversion means converts a the rotational signal by means of multiplying the cycle and number of pulses of said rotational signal of said first rotational operation means by a ratio, ~~said ratio standing between~~ of the cycle and number of pulses of said rotational signal of said first operation means ~~achieved at a reference rotational speed and a reference rotational angle and~~ to the cycle and number of pulses of said rotational signal of said second operation means achieved at said reference rotational speed and said reference rotational angle.

14. (currently amended) ~~The apparatus according to claim 10;~~ An audio signal reproduction apparatus, comprising:

rotational operation means; and

processing means which reproduces an audio signal recorded on an optical disk in accordance with at least a rotational signal representing an operation speed of said rotational operation means and which outputs said audio signal as scratch sound,

wherein

said rotational operation means includes first and second rotational operation means; and

said processing means has conversion means for converting at least either a rotational signal output from said first rotational operation means or a rotational signal output from said second rotational operation means such that an identical rotational

signal is achieved when said first and second rotational operation means are rotated at the same rotational speed.

wherein one of the first and second rotational operation means is a jog dial, and the other operation means is a turntable.

15. (original) The apparatus according to claim 14, further comprising:

jitter detection means for detecting jitter of a rotational signal output from said turntable, wherein

said processing means does not output said scratch sound and reproduces said audio signal at constant double speed when said jitter is equal to or less than a predetermined allowable value.